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<110> Bristol-Myers Squibb Company

<120> Polynucleotide Encoding a Novel Human Potassium Channel
Beta-subunit, K+betaM2

<130> D0076 NP

<140> 10/056,884

<141> 2002-01-24

<150> 60/263,872

<151> 2001-01-24

<150> 60/269,794

<151> 2001-02-14

<160> 74

<170> PatentIn version 3.2

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His Ser Thr Leu Ile Ser Ile Pro His Ser Leu Leu Trp Lys Met Phe	
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Ser Pro Lys Arg Asp Thr Ala Asn Asp Leu Ala Lys Asp Ser Lys Gly	
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Tyr Leu Arg Asp Arg Gln Val Val Leu Pro Asp His Phe Pro Glu Lys	
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Gly Arg Leu Lys Arg Glu Ala Glu Tyr Phe Gln Leu Pro Asp Leu Val	
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Lys Leu Leu Thr Pro Asp Glu Ile Lys Gln Ser Pro Asp Glu Phe Cys	
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Gly Gln Val Tyr Phe Thr Arg His Ser Thr Leu Ile Ser Ile Pro His
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Ser Leu Leu Trp Lys Met Phe Ser Pro Lys Arg Asp Thr Ala Asn Asp
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Leu Ala Lys Asp Ser Lys Gly Arg Phe Phe Ile Asp Arg Asp Gly Phe
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Leu Phe Arg Tyr Ile Leu Asp Tyr Leu Arg Asp Arg Gln Val Val Leu
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Pro Asp His Phe Pro Glu Lys Gly Arg Leu Lys Arg Glu Ala Glu Tyr
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Phe Gln Leu Pro Asp Leu Val Lys Leu Leu Thr Pro Asp Glu Ile Lys
 115 120 125

Gln Ser Pro Asp Glu Phe Cys His Ser Asp Phe Glu Asp Ala Ser Gln
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Gly Ser Asp Thr Arg Ile Cys Pro Pro Ser Ser Leu Leu Pro Ala Asp
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Arg Lys Trp Gly Phe Ile Thr Val Gly Tyr Arg Gly Ser Cys Thr Leu
 165 170 175

Gly Arg Glu Gly Gln Ala Asp Ala Lys Phe Arg Arg Val Pro Arg Ile
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Leu Val Cys Gly Arg Ile Ser Leu Ala Lys Glu Val Phe Gly Glu Thr
 195 200 205

Leu Asn Glu Ser Arg Asp Pro Asp Arg Ala Pro Glu Arg Tyr Thr Ser
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Arg Phe Tyr Leu Lys Phe Lys His Leu Glu Arg Ala Phe Asp Met Leu
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Ser Glu Cys Gly Phe His Met Val Ala Cys Asn Ser Ser Val Thr Ala
245 250 255

Ser Phe Ile Asn Gln Tyr Thr Asp Asp Lys Ile Trp Ser Ser Tyr Thr
260 265 270

Glu Tyr Val Phe Tyr Arg Glu Pro Ser Arg Trp Ser Pro Ser His Cys
275 280 285

Asp Cys Cys Cys Lys Asn Gly Lys Gly Asp Lys Glu Gly Glu Ser Gly
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Thr Ser Cys Asn Asp Leu Ser Thr Ser Ser Cys Asp Ser Gln Ser Glu
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Ala Ser Ser Pro Gln Glu Thr Val Ile Cys Gly Pro Val Thr Arg Gln
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Thr Asn Ile Gln Thr Leu Asp Arg Pro Ile Lys Lys Gly Pro Val Gln
340 345 350

Leu Ile Gln Gln Ser Glu Met Arg Arg Lys Ser Asp Leu Leu Arg Ile
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Leu Thr Ser Gly Ser Arg Glu Ser Asn Met Ser Ser Lys Lys Lys Ala
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Val Lys Glu Lys Leu Ser Ile Glu Glu Glu Leu Glu Lys Cys Ile Gln
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 gacaggcaga tgccaagttt cggagagttc cccggatttt ggtttgtgga aggatttcct 720
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Tyr Pro Asp Ser Met Leu Gly Ala Met Phe Gly Gly Asp Phe Pro Thr
 35 40 45

Ala Arg Asp Pro Gln Gly Asn Tyr Phe Ile Asp Arg Asp Gly Pro Leu
 50 55 60

Phe Arg Tyr Val Leu Asn Phe Leu Arg Thr Ser Glu Leu Thr Leu Pro
 65 70 75 80

Leu Asp Phe Lys Glu Phe Asp Leu Leu Arg Lys Glu Ala Asp Phe Tyr
 85 90 95

Gln Ile Glu Pro Leu Ile Gln Cys Leu Asn Asp Pro Lys Pro Leu Tyr
 100 105 110

Pro Met Asp Thr Phe Glu Glu Val Val Glu Leu Ser Ser Thr Arg Lys
 115 120 125

Leu Ser Lys Tyr Ser Asn Pro Val Ala Val Ile Ile Thr Gln Leu Thr
 130 135 140

Ile Thr Thr Lys Val His Ser Leu Leu Glu Gly Ile Ser Asn Tyr Phe
 145 150 155 160

Thr Lys Trp Asn Lys His Met Met Asp Thr Arg Asp Cys Gln Val Ser
 165 170 175

Phe Thr Phe Gly Pro Cys Asp Tyr His Gln Glu Val Ser Leu Arg Val
 180 185 190

His Leu Met Glu Tyr Ile Thr Lys Gln Gly Phe Thr Ile Arg Asn Thr
 195 200 205

Arg Val His His Met Ser Glu Arg Ala Asn Glu Asn Thr Val Glu His
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Asn Trp Thr Phe Cys Arg Leu Ala Arg Lys Thr Asp Asp
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Phe Gly Glu Gly Arg Asp Ser Leu Ala Lys Asp Ser Lys Gly Arg Tyr
 35 40 45

Phe Leu Asp Arg Asp Gly Val Leu Phe Arg Tyr Ile Leu Asp Phe Leu
 50 55 60

Arg Asp Lys Ala Leu His Leu Pro Glu Gly Phe Arg Glu Arg Gln Arg
65 70 75 80

Leu Leu Arg Glu Ala Glu His Phe Lys Leu Thr Ala Met Leu Glu Cys
85 90 95

Ile Arg Ser Glu Arg Asp Ala Arg Pro Pro Gly Cys Ile Thr Ile Gly
100 105 110

Tyr Arg Gly Ser Phe Gln Phe Gly Lys Asp Gly Leu Ala Asp Val Lys
115 120 125

Phe Arg Lys Leu Ser Arg Ile Leu Val Cys Gly Arg Val Ala Gln Cys
130 135 140

Arg Glu Val Phe Gly Asp Thr Leu Asn Glu Ser Arg Asp Pro Asp His
145 150 155 160

Gly Gly Thr Asp Arg Tyr Thr Ser Arg Phe Phe Leu Lys His Cys Tyr
165 170 175

Ile Glu Gln Ala Phe Asp Asn Leu His Asp His Gly Tyr Arg Met Ala
180 185 190

Gly Ser Cys Gly Ser Gly Thr Ala Gly Ser Ala Ala Glu Pro Lys Pro
195 200 205

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Phe Ile Arg Asp
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 35 40 45
 Val Thr Leu Pro Asp Gly Thr Leu Phe Val Asp Arg Asp Gly Pro Leu
 50 55 60
 Phe Ala Tyr Val Leu His Phe Leu Arg Thr Asp Lys Leu Ser Leu Pro
 65 70 75 80
 Glu Gln Phe Arg Glu Val Ala Arg Leu Lys Asp Glu Ala Asp Phe Tyr
 85 90 95
 Arg Leu Glu Arg Phe Ser Thr Leu Leu Ser Asn Ala Ser Ser Ile Ser
 100 105 110
 Pro Arg Pro Arg Thr Ala Asn Gly Tyr Asn Thr Ile Thr Ser Gly Ala
 115 120 125
 Glu Thr Gly Gly Tyr Ile Thr Leu Gly Tyr Arg Gly Thr Phe Ala Phe
 130 135 140
 Gly Arg Asp Gly Gln Ala Asp Val Lys Phe Arg Lys Leu His Arg Ile
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35 40 45

Thr Lys Tyr Pro Glu Ser Arg Ile Gly Arg Leu Phe Asp Gly Thr Glu
50 55 60

Pro Ile Val Leu Asp Ser Leu Lys Gln His Tyr Phe Ile Asp Arg Asp
65 70 75 80

Gly Gln Met Phe Arg Tyr Ile Leu Asn Phe Leu Arg Thr Ser Lys Leu
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Leu Ile Pro Asp Asp Phe Lys Asp Tyr Thr Leu Leu Tyr Glu Glu Ala
100 105 110

Lys Tyr Phe Gln Leu Gln Pro Met Leu Leu Glu Met Glu Arg Trp Lys
115 120 125

Gln Asp Arg Glu Thr Gly Arg Phe Ser Arg Pro Cys Glu Cys Leu Val
130 135 140

Val Arg Val Ala Pro Asp Leu Gly Glu Arg Ile Thr Leu Ser Gly Asp
145 150 155 160

Lys Ser Leu Ile Glu Glu Val Phe Pro Glu Ile Gly Asp Val Met Cys
165 170 175

Asn Ser Val Asn Ala Gly Trp Asn His Asp Ser Thr His Val Ile Arg
180 185 190

Phe Pro Leu Asn Gly Tyr Cys His Leu Asn Ser Val Gln Val Leu Glu
195 200 205

Arg Leu Gln Gln Arg Gly Phe Glu Ile Val Gly Ser Cys Gly Gly Gly
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35 40 45

Phe Phe Ile Asp Arg Asp Gly Phe Leu Phe Arg Tyr Ile Leu Asp Tyr
50 55 60

Leu Arg Asp Arg Gln Val Val Leu Pro Asp His Phe Pro Glu Lys Gly
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Leu Leu Thr Pro Asp Glu Ile
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Thr Ile Gly Thr Leu Thr Lys Asn Asn Asp Thr Met Leu Ser Ala Met
 35 40 45

Phe Ser Gly Arg Met Glu Val Leu Thr Asp Ser Glu Gly Trp Ile Leu
 50 55 60

Ile Asp Arg Cys Gly Asn His Phe Gly Ile Ile Leu Asn Tyr Leu Arg
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Asp Gly Thr Val Pro Leu Pro Glu Thr Asn Lys Glu Ile Ala Glu Leu
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Leu Ala Glu Ala Lys Tyr Tyr Cys Ile Thr Glu Leu Ala Ile Ser Cys
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Glu Arg Ala Leu Tyr Ala His Gln Glu Pro Lys Pro Ile Cys Arg Ile
 115 120 125

Pro Leu Ile Thr Ser Gln Lys Glu Glu Gln Leu Leu Leu Ser Val Ser
 130 135 140

Leu Lys Pro Ala Val Ile Leu Val Val Gln Arg Gln Asn Asn Lys Tyr
 145 150 155 160

Ser Tyr Thr Ser Thr Ser Asp Asp Asn Leu Leu Lys Asn Ile Glu Leu
 165 170 175

Phe Asp Lys Leu Ser Leu Arg Phe Asn Glu Arg Ile Leu Phe Ile Lys
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Asp Val Ile Gly Pro Ser Glu Ile Cys Cys Trp Ser Phe Tyr Gly His
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Gly Lys Lys Val Ala Glu Val Cys Cys Thr Ser Ile Val Tyr Ala Thr
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Asp Arg Lys His Thr Lys Val Glu Phe Pro Glu Ala Arg Ile Tyr Glu
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Glu Leu Met Gln Ala Thr Ser Ser Ala Arg Val Gly Ser Ala Ser Gly
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35 40 45

Tyr Asp Asp Asp Thr Asn Glu Tyr Phe Phe Asp Arg His Pro Lys His
50 55 60

Phe Arg His Ile Leu Asn Tyr Tyr Arg Thr Gly Asp Gly Lys Leu His
65 70 75 80

Cys Pro Glu Met Cys Val Asp Ser Phe Leu Glu Glu Ala Glu Phe Trp
85 90 95

Gly Ile Asp Glu Leu His Ile Glu Asp Cys Cys Trp Asp Glu Tyr
100 105 110